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Combined partial regularization and descent method for a generalized primal-dual system

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Abstract

A variational inequality system, which is a generalization of the saddle point problem, is considered. The system does not possess monotonicity properties and the feasible set is unbounded in general. To solve the problem we propose a completely implementable iterative scheme, whose convergence is proved under certain coercivity type conditions. © 2012 Springer-Verlag.

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Keywords

Generalized primal-dual systems, Nonmonotone variational inequalities, Partial regularization method, Unbounded feasible set